

### Abstract of the Disclosure

A coding scheme for use with a CSMA protocol to enable transmission of high data rate information signals thereover, wherein the protocol includes an OFDM physical layer, a MAC layer and a CSMA protocol inner code, includes providing an outer coding generator; generating outer code words containing coded and uncoded data therein in the outer code generator; wherein, the generated outer code words fit with a small multiple of data bits with an OFDM symbol having a fixed number of data bits, thereby providing for transmission of high data rate information using the outer code and the CSMA protocol inner code at a data rate of at least 24 Mbps and at a packet error rate of less than  $1.5 \cdot 10^{-9}$ .